

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

1-11. (canceled)

12. (original) A method, comprising:

 applying a bottom anti-reflective coating comprising a polymer and a plurality of refractive polymer beads;

 applying a photoresist above the anti-reflective coating;

 patterning the photoresist;

 etching the substrate to form a first opening;

 applying a sacrificial anti-reflective coating comprising a spin-on-polymer and a plurality of refractive polymer beads over the substrate and the first opening such that the first opening is filled with the sacrificial anti-reflective coating;

 applying a photoresist over the sacrificial anti-reflective coating;

 patterning the photoresist;

 etching the substrate and the sacrificial anti-reflective material over the first opening to form a second opening; and

 filling the first opening and the second opening with a metal.

13. (original) The method of claim 12, wherein the plurality of refractive polymer beads have a core-shell structure comprising an inorganic reflective core and an organic refractive shell.

14. (original) The method of claim 12, wherein the plurality of refractive polymer beads have a core-shell structure comprising an absorbent core and an organic refractive shell.

15-17. (canceled)

18-30. (canceled)